

UR20-8AI-I-PLC-INT**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image**Inputs can be parameterised; up to 3-wire + FE;
accuracy 0.1% FSR**

Analogue input modules of the u-remote system are available in many variants with different resolutions and wiring solutions.

Variants are available with 12- and 16-bit resolution, which record up to 4 analogue sensors with ± 10 V, ± 5 V, 0...10 V, 0...5 V, 2...10 V, 1...5 V, 0...20 mA or 4...20 mA with maximum accuracy. Each plug-in connector can optionally connect sensors with 2- or 3-wire technology. The parameters for the measurement range can be individually set for each channel. In addition, each channel has its own status LED. A special variant for Weidmüller interface units enables current measurements with 16-bit resolution and maximum accuracy for 8 sensors at a time (0...20 mA or 4...20 mA).

The module electronics supply the connected sensors with power from the input current path (U_{IN}).

General ordering data

Version	Remote I/O module, IP20, Analog signals, Input, PLC
Order No.	1315670000
Type	UR20-8AI-I-PLC-INT
GTIN (EAN)	4050118118810
Qty.	1 pc(s).

UR20-8AI-I-PLC-INT

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Dimensions and weights

Depth	76 mm	Depth (inches)	2.992 inch
Height	120 mm	Height (inches)	4.724 inch
Mounting dimension - height	128 mm	Net weight	85 g
Width	11.5 mm	Width (inches)	0.453 inch

Temperatures

Storage temperature	-40 °C ... +85 °C	Operating temperature	-20 °C ... +60 °C
---------------------	-------------------	-----------------------	-------------------

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
------------	----------------

analogue inputs

Accuracy	0.1% FSR	Conversion time	1 ms
Individual channel diagnosis	No	Internal resistance I	50 Ω
Module diagnosis	Yes	Number of analogue inputs	8
Resolution	16 Bit	Response time	< 0.1s
Reverse polarity protection	Yes	Sensor connection	PLC interface unit
Sensor supply	external	Short-circuit-proof	Yes
Type	Current input		

Connection data

I/O plug-in connector	20-pin ribbon cable connection	Type of connection	PUSH IN
Wire connection cross section, finely stranded, max.	1.5 mm ²	Wire connection cross section, finely stranded, min.	0.14 mm ²
Wire cross-section, finely stranded, max. (AWG)	AWG 16	Wire cross-section, finely stranded, min. (AWG)	AWG 26
Wire cross-section, solid, max.	1.5 mm ²	Wire cross-section, solid, max. (AWG)	AWG 16
Wire cross-section, solid, min.	0.14 mm ²	Wire cross-section, solid, min. (AWG)	AWG 26

General data

Air humidity (operation)	10% to 95%, non-condensing as per DIN EN 61131-2		
Air humidity (storage)	10% to 95%, non-condensing as per DIN EN 61131-2		
Air humidity (transport)	10% to 95%, non-condensing as per DIN EN 61131-2		
Air pressure (operation)	≥ 795 hPa (height ≤ 2000 m) as per DIN EN 61131-2		
Air pressure (storage)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2		
Air pressure (transport)	1013 hPa (height 0 m) to 700 hPa (height 3000 m) as per DIN EN 61131-2		
Pollution severity	2		
Rail	TS 35		
Restricted area	Positive expansion	X coordinate	43 mm
		Z coordinate	85 mm
		Y coordinate	160 mm
	Type of restricted area thermal		
	Negative expansion	Z coordinate	0 mm
		Y coordinate	-40 mm
		X coordinate	-28 mm
Shock	15 g over 11 ms, half sinus wave, acc. to IEC 60068-2-27		
Surge voltage category	II		
Test voltage	500 V		
UL 94 flammability rating	V-0		

Creation date March 23, 2021 3:43:46 PM CET

UR20-8AI-I-PLC-INT

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Vibration resistance 5 Hz ≤ f ≤ 8.4 Hz: 3.5-mm amplitude as per IEC 60068-2-6, 8.4 Hz ≤ f ≤ 150 Hz: 1 g acceleration as per IEC 60068-2-6

Power supply

Current consumption from I_{IN} (power segment of the field bus coupler), typ. 8 mA

Current consumption from I_{IN} (power segment of the fieldbus coupler), typ.

min.	8 mA
nominal	8 mA
max.	8 mA

Current consumption from I_{IN} (the respective power segment) < 20 mA

Current consumption from I_{IN} (the respective power segment)

max.	20 mA
nominal	20 mA
min.	20 mA

Reverse polarity protection Yes

Voltage supply 24 V DC +20 %/ -15 %, via the system bus

RS interface

Individual channel diagnosis	No	Module diagnosis	Yes
Short-circuit-proof	Yes		

Serial inputs

Individual channel diagnosis	No	Module diagnosis	Yes
Short-circuit-proof	Yes		

System data

Diagnostic data		Field bus protocol	PROFINET IRT, PROFINET RT, PROFIBUS DP-V1, EtherCAT, Modbus/TCP, EtherNet/IP, CANopen, DeviceNet, POWERLINK, CC-Link, CC-Link IE TSN
	1 Bit		
Galvanic isolation	500 V DC between the current paths	Interface	u-remote system bus
Module type	Special module	Parameter data	14 Byte
Process data	16 Byte	Transmission speed of system bus, max.	48 Mbit/s

Classifications

ETIM 6.0	EC001596	ETIM 7.0	EC001596
ECLASS 9.0	27-24-26-01	ECLASS 9.1	27-24-26-01
ECLASS 10.0	27-24-26-01	ECLASS 11.0	27-24-26-01

UR20-8AI-I-PLC-INT

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Tender specification sheets

Long specification

Analogue input module
8AI-I-PLC-INT 8-channel
analogue input module,
positively switching
Module for connecting
ribbon cables/transfer
elements Connection
system: PUSH-IN
Dimensions (HxWxD):
120 mm (with lever: 128
mm), 11.5 mm, 76 mm
Module status: display via
collective message, LED
at the top of the module
Channel status: indication
directly at the contact
point Weight: 73 g Module
diagnosis: yes Individual
channel diagnosis: no
Reverse-polarity protection:
no Operating temperature:
-20°C - +60°C Process
data: 16 bytes Parameter
data: 14 bytes Diagnostic
data: 1 bit Galvanic
isolation: between
field and system bus
Supply voltage: 24 VDC
+25% / -15% Internal
current consumption:
8 mA Supply current
consumption: 20 mA
Accuracy: 0.1% FSR
Conversion time: 1 ms
Internal resistance I:
approx. 50 Ω Resolution:
16 bits Brand: Weidmüller
Type: UR20-8AI-I-PLC-INT

Approvals

Approvals



ROHS

Conform

UL File Number Search

E141197

UR20-8AI-I-PLC-INT

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration_of_Conformity
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Product Change Notification	Release-Notes - Firmware
User Documentation	MAN_U-REMOTE_DE MAN_U-REMOTE_EN

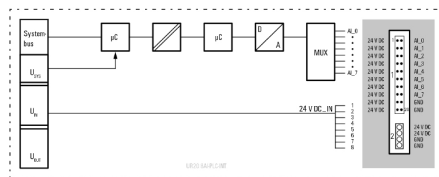
UR20-8AI-I-PLC-INT

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Drawings

Block diagram



Connection diagram

